The Griffith Foundation for Insurance Education
Promoting the Teaching of Risk Management and Insurance

The Basics of Risk Management and Insurance

A Seminar for State Legislators

Presented by:
The Griffith Foundation for Insurance Education

623 High Street
Worthington, Ohio 43085
Phone: 614-880-9870
Fax: 614-880-9872
Email: info@griffithfondation.org
Website: www.griffithfoundation.org

Table of Contents

Helen I. Doerpinghaus, Ph.D.

Helen I. Doerpinghaus is a Professor of Insurance at The Moore School of Business at the University of South Carolina where she has been on the faculty since 1987. She received her Ph.D. from The Wharton School at the University of Pennsylvania in insurance and health care finance. Professor Doerpinghaus has authored articles on insurance economics , health economics, and employee benefits in a variety of scholarly journals, including *The Journal of Risk and Insurance, Inquiry, Benefits Quarterly, Risk Management and Insurance Review,* and others. She coauthored the 7th edition of *Risk Management and Insurance*, and is a contributor to the text, *International Risk and Insurance: An Environmental-Managerial Approach.* She is on the editorial board of *The Journal of Risk and Insurance*, *Benefits Quarterly*, and several other scholarly journals. She has received the University's Michael J. Mungo Teaching Award and Mortar Board Teaching Award as well as The Moore School's Alfred G. Smith, Jr. Teaching Award.

Professor Doerpinghaus is a Past President of the American Risk and Insurance Association, the premier academic organization for risk and insurance education. She is also a Past President of the Southern Risk and Insurance Association, and currently serves as Educational Chair of the Palmetto Chapter of RIMS, and faculty sponsor of the Lambda Chapter of Gamma Iota Sigma, the student risk management and insurance society. She is on the Administrative Board of the S.S. Huebner Foundation at The Wharton School of Business. Professor Doerpinghaus has served on the Governor's Health Insurance Reform Committee, the Governor's Access to Health Insurance Coverage Study Group, and various legislative committees on health policy.

Helen I. Doerpinghaus
Professor of Insurance
University of South Carolina
The Moore School of Business
Columbia, South Carolina 29208
(803) 777-4926 – Office
(803) 777-6876 – Fax
E-Mail - doerp@moore.sc.edu

RISK MANAGEMENT CONCEPTS

I. RISK IN SOCIETY

A. Life Is Not Risk Free

B. Risk Management and Insurance Terminology

1. Chance of Loss Defined

2. Risk Defined

3. Risk and Chance of Loss Distinguished

4. Other Important Terminology

a. Perils

b. Hazard

i. Physical

ii. Moral

iii. Morale

C. Classifications of Risk

1. Pure versus Speculative Risk

   a. Pure - Loss or No Loss

   b. Speculative - Loss or Gain

2. Particular versus Fundamental

   a. Particular - Personal in Cause and Consequence

   b. Fundamental - Impersonal in Cause and Consequence

3. Static versus Dynamic

   a. Static - Constant

   b. Dynamic – Change

4. Enterprise Risk

D. Economic Effects Of Risk And Its Treatment

1. Burden of Risk

   a. Larger Emergency Fund

   b. Loss of Goods and Services

   c. Worry and Fear

2. Social Costs of Risk Treatment

   a. Cost of Operating the Insurance Mechanism

   b. Fraudulent Claims

   c. Inflated Claims

3. Social Benefits of Risk Treatment

   a. Indemnification for Losses

   b. Less Worry and Fear

   c. Source of Investment Funds

   d. Loss Prevention

      i. Private Efforts

      ii. Public Efforts

   e. Enhancement of Credit

II. RISK MANAGEMENT CONCEPTS

A. Nature Of Risk Management (Objectives)

1. Risk Management Defined - the formalized process used to evaluate loss exposures and select the most appropriate technique for treating such exposures

   a. Formalized Steps

   b. Role of "Risk Manager"

   c. Includes employee benefit management

   d. Goal: Minimize the financial impact of pure risk on the entity

2. Risk Management Objectives

a. Pre Loss

i. Prepare for Losses in Most Economical Way

ii. Reduce Anxiety

iii. Meet Externally Imposed Obligations

b. Post Loss

i. Resume operation in a timely way

ii. Continue Operation

iii. Stabilize Earnings

iv. Continue Growth

v. Meet Social Responsibility

B. Risk Management Process

1. Identify Risks - Ask “What Can Happen”

   a. Property Risks

      i. Direct

      ii. Indirect

   b. Liability (3rd Party) Risks

      i. Tort

      ii. Absolute

      iii. Contract

   c. Personnel / Personal (Employee Benefit) Risks

      i. Income Losses

      ii. Expense Losses

2. Evaluate Risks and Financial Capacity

   a. Financial Capacity Sets "Shock Loss Level"

   b. Expected Value of Loss (EVL)

      i. Frequency

      ii. Severity

   c. Patterns of EVL

3. Analyze and Select Appropriate Risk Treatment Techniques

a. Avoid

b. Retain (Assume)

i. Simple

ii. Self Insurance (including Captives, Risk Retention Groups)

(a) Nature of Self Insurance

- Entity decides to pay for losses from current revenue or from pre-funded accounts

- Typically, employer provided health care benefits and workers compensation

- Best-suited for high frequency and low severity claims

(b) Advantages of Self Insurance

- Improved Cash Flow
- Reduced loading and assessment
- Improved loss prevention/reduction
- Reduced regulation of health benefits

(c) Disadvantages of Self Insurance

- Potential for catastrophic losses
- Administrative burden
- Direct claim interaction with employees
- Reduced tax advantage (in some cases)

c. Loss Control

i. Loss Prevention and/or Reduction

ii. Human and Engineering Approaches

d. Risk Transfer

i. Non Insurance

ii. Insurance

(a) Risk Transfer and Pooling

- Risk Transfer from the Insured to the Insurer

  – Insurer assumes financial responsibility for loss

  – Insurer indemnifies the insured

  – Indemnification may be in cash, replacement/repair of asset, or provision of services

  – 1st party versus 3rd party claims

- Insurer Accepts Risk Transfer through Pooling

    - By accepting many exposures to loss, the accuracy of predictions of future losses for the group improves

    - The more exposures in the insurance pool the more accurate will be the predictions (Law of Large Numbers)

(b) Trading Uncertainty for Certainty

- Without insurance the individual is uncertain about frequency and severity of loss

- With insurance the individual trades a potentially large and unpredictable loss for a relatively small and predictable loss in the form of a premium

4. Implement Risk Management Plan

5. Review and Revise Risk Management Plan

The page left intentionally blank.

POOLING OF RISKS

I. RISK POOLING

A. Overview

1. Pooling of exposures for distribution of losses

2. Pooling for redistribution of income

3. Self-insured, multiple pools, and single pool

4. Cost/benefit analysis

B. Public Systems

1. Mandatory

2. Competitive

C. Private Systems (Voluntary)

1. Risk Evaluation

   a. Identify risks with similar characteristics

   b. Information

      i. inadequate information

      ii. misinformation

      iii. relevant information

      iv. confidentiality

      v. right of privacy

   c. Adverse Selection

2. Risk Classifications

a. Fairness

i. actuarial

ii. public policy

iii. insufficient classifications

b. Rate Adequacy

c. Availability

D. Public and Private Sector Concerns Regarding Losses

1. Loss prevention and mitigation

2. Legal deterrence and economic incentives

3. Risk and cost shifting between and within public and private sectors

The page left intentionally blank.

PRINCIPLES OF INSURANCE

A. Identifying Insurable Risks

1. Requisites of An Insurable Risk (Not all risks are privately insurable)

   a. Large Number of Homogeneous Exposure Units

      i. Large Number - accuracy of predictions

      ii. Homogeneous - similar with respect to expected loss

         (a) Underwriting and Risk Classification designed to produce homogeneity - charge higher risks higher premiums and lower risks lower premiums

         (b) Community Rating is where an insurer charges every insured the same premium which provides no incentive to be a good risk, no penalty for being a bad risk, and eventually good risks drop out and premiums rise for the pool

b. Loss Must Be Fortuitous (Accidental and Unintentional)

i. Loss should be beyond the control of the insured

ii. Avoid problems of moral and morale hazard where the presence of insurance changes the insureds' behavior so as to increase either the frequency and/or severity of loss

c. Loss Must be Determinable and Measurable (Time, Place, & Amount)

d. No Incalculable Catastrophic Loss Potential

i. Occurrence of a single event should not cause multiple losses (earthquake, flood, hurricane…)

ii. Solved partially by geographic and financial diversification (Reinsurance)

e. Insuring Loss Must Be Economically Feasible

i. Loss being insured should be significant to the insured

ii. Cost of insuring (net premium + loading) low relative to the size of the potential loss

2. Limits to Insurability

a. Adverse Selection

b. Moral Hazard

B. Measuring Insurable Risks

1. Elements of Risk Measurement

a. Frequency

b. Severity

c. Expenses

d. Investment Income (timing)

2. Uniqueness of Insurance Pricing

a. Pricing Before the Fact

b. Reliance on the Past

c. Timeliness

3. Important Statistical Concepts

    a. The Law of Large Numbers

    b. Double Application of the Law of Large Numbers

    c. Pertinent and Broad Date Base

    d. Statistical Organizations

C. Risk Modification Activities

1. Loss Prevention and Reduction

2. Deductibles

3. Coinsurance (Insurance to Value)

4. Copayment (Participation)

5. Exclusions

D. Writing Insurable Risks

1. Transfer and Pooling of Risks

2. Adequate, Equitable, and Reasonable Rate Structure

3. Role of Contract

E. Role Of Insurance In Society

1. Loss Distribution Mechanism

2. Loss Prevention and Mitigation

3. Source of Investment Funds

4. Economic Development of Commerce

5. Employment

The page left intentionally blank.

MORTALITY RISKS

I. NATURE OF THE LOSS

A. Expenses of Death (Liquidity)

B. Loss of Earning Capacity (Human Life Value)

II. NATURE OF THE RISK ENVIRONMENT

A. Stable Loss Experience (Slow Change)

B. Total Loss Only (Few Loss Adjustment Problems)

C. Long Term Risks (Interest is a Factor)

III. WRITING LIFE INSURANCE RISKS

A. Developing Rates

1. Mortality Experience

   a. Individual vs Group

   b. Male vs. Female

   c. Smoker vs. Nonsmoker

   d. Other factors

2. Interest income

3. Loading

   a. Expenses

   b. Contingencies

   c. Profits

4. Actuarial Soundness

B. Underwriting Life Risks

1. Terminology

   a. Insurable Interest

   b. Adverse Selection

2. Underwriting Process

   a. Risk Classification

      i. Purpose

      ii. Classification Factors

         (a) Age

         (b) Health

         (c) Unique Factors

            (i) Hobbies

            (ii) Job

            (iii) Foreign Residence

            (iv) Financial

   b. Emerging Issues (Genetic Testing, Obesity)

IV. TYPES OF LIFE INSURANCE PRODUCTS

A. Traditional Products

1. Term

2. Whole Life

3. Annuities

B. Other Life Products

1. Variable Life Insurance

2. Universal Life Insurance

3. Universal Variable Life Insurance

4. Variable Annuities

V. TRENDS IN THE LIFE INSURANCE BUSINESS

PROPERTY RISKS

I. NATURE OF THE PROPERTY RISK

A. Types of Property Exposed to Loss

1. Real Property (typically not land)

2. Personal Property

B. Causes of Property Loss

1. Named Perils

2. Difficult to Insure Perils

3. Generally Uninsurable Perils

C. Consequences of Property Loss

1. Direct Loss

2. Indirect Loss

D. Evolution of Property Insurance

1. Early History

2. Fire Policy

3. Package Policies and Simllification

4. Risk Classification and Underwriting

E. Rating Factors Used

Homeowners example

Location

Construction

Fire Protection

Anti-theft Features

Building Codes

Age of Property

Loss History

Credit-based Insurance Score

II. PROPERTY INSURANCE POLICIES

A. Major Types

1. Homeowners (HO)
2. Building and Personal Property (BPP)
3. Business Income (BIC)
4. Boiler and Machinery
5. Inland Marine
6. Ocean Marine
7. Crime (Employee Dishonesty)
8. Difference in Conditions (DIC)

B. Provisions relating to Recovery Amounts

1. Coinsurance Clause and Deductibles

2. Valuation

   a. Actual Cash Value (ACV)

   b. Replacement Cost (RC)

3. Subrogation

4. Salvage

III. ISSUES OF CONCERN IN PROPERTY INSURANCE

A. Frequently Uninsured Perils

1. Flood

2. Earthquake

B. Terrorism

C. Catastrophes

1. Concentration of Risk

2. Availability of Reinsurance

3. Capital Markets

4. Reserving

D. Securitization of Property Risk

1. Cat Bonds

2. Earthquake Bonds

3. New Products

E. Access to Insurance

1. Urban Areas

2. Coastal Areas

F. Increased Frequency and Severity of Losses

TORT SYSTEM AND THE BASIS FOR LIABILITY

I. LEGAL LIABILITY ENVIRONMENT

A. Objectives of the Civil Justice System

1. Deterrence

2. Compensation

3. Responsibility / Accountability

B. Cost of the U.S. Tort System

C. Efficiency of the Tort System

II. TORT LIABILITY

A. Definition of Tort

Wrongful act or omission, independent of contract

B. Types of Tort

1. Negligence

2. Intentional Torts

3. Strict Liability

C. **Types of Damages**

1. Compensatory (special and general)

2. Punitive

III. CIVIL JUSTICE SYSTEM PROPOSALS

A. **Concerns about the system**

B. **Expanding Areas of Legal Liability**

C. **Tort Reform Proposals**

1. Attorney Fees

2. Frivolous Suits (loser pays)

3. Limits on Expert Testimony

4. Limiting Punitive Damages

5. Caps on Noneconomic Damages

6. Collateral Source Rule

7. Joint and Several Liability

8. Alternative Dispute Resolution (ADR)

9. Limits on Class Action Lawsuits

LIABILITY RISKS

I. NATURE OF LIABILITY RISKS

A. General Characteristics

1. Involvement of a Third Party

2. Difficulty in Defining the Risk

    a. Measurement of the Loss Amount

    b. Establishing Fault

    c. Identifying the Scope of Exposure

3. "Long-Tail" Problem

B. Types of Liability Exposures

1. Contractual Liability
2. Employer-Employee Liability
3. Property Owner-Tenant Liability
4. Consumption or Use of Products
5. Completed Operations of a Contractor
6. Professional Acts
7. Principal-Agent Liability
8. Ownership and Operation of Automobiles

II. LIABILITY INSURANCE POLICIES

A. Major Types of Policies

1. Homeowners
2. Personal Auto Policy (PAP)
3. Commercial General Liability (CGL)
4. Businss Auto Coverage (BAC)
5. Umbrella Liability Policies (Commercial and Personal)
6. Directors and Officers Liability (D & O)
7. Environmental Impair. Liab. (EIL)
8. Workers Compensation
9. Employment Practices Liability (EPL)
10. Professional Liability (Malpractice)

B. Important Liability Policy Concepts

1. Policy Trigger
   a. Accident
   b. Occurrence
   c. Claims-Made
2. Policy Limits
3. Defense Costs

4. Underwriting Factors

   a. Moral Hazard

   b. Adverse Selection

C. Emerging Liability Insurance Issues

1. Pollution
2. Asbestos
3. Employment Practices
4. Health Care Liability
5. 3rd party Bad Faith Suits
6. Diminished Value
7. Class Action Suits
8. D & O Liability, Corporate Governance
9. Obesity
10. Guns
11. E-risks / Information Privacy
12. Terorism

II. AUTO EXPOSURES AND INSURANCE

A. Nature of the Auto Risk

1. Single largest line of property-casualty insurance

2. Affects nearly all individuals and businesses

3. Sources of Liability

   a. Common Law

   b. Statutes

   c. Regulations

4. Liability for Others (Vicarious)

B. Typical Auto Insurance Coverages (1st and 3rd Party)

1. Liability

2. Medical Payments

3. Uninsured/Underinsured Motorist Coverage

4. Personal Injury Protection (PIP)

5. Physical Damage Coverage

   a. Collision

   b. Comprehensive (OTC)

C. Rating Factors Used

1. Territory
2. Type of Vehicle
3. Age
4. Gender
5. Marital Status
6. Mileage
7. Claim Record
8. Driving Record
9. Credit-Based Insurance Score

D. No-Fault Laws

1. Pure No-Fault
2. Modified No-Fault
    a. Verbal Thresholds
    b. Dollar Thresholds
    c. Add-on Laws
    d. Choice Systems
3. Evidence on Costs

E. **Auto Insurance Costs**

1. Mandatory Coverage, Rising Premium

2. Factors Driving Increase

    a. Medical Cost Inflation

    b. Jury Awards in Vehicular Liability Cases

    c. Restrictions on the Use of Generic Parts

    d. Higher Costs for Body Work

    e. Insurance Fraud and Abuse

F. **Cost of Insurance Fraud**

1. $85 to $120 Billion Per Year (estimated)

2. Property Casualty Fraud $27 Billion (est.)

    a. Auto $6.3 B; Workers' Comp $5 B

III. SUMMARY

A. **Costs of the Legal System are a Cost of Production for Insurers**

B. **Defining the Risk in a Dynamic Legal Environment is a Challenge**

C. **Careful Policy Design and Underwriting Are Critical**

BUSINESS OF INSURANCE

I. STRUCTURE OF INSURANCE MARKET

A. Types of Insurers

1. Property-Liability Insurers
2. Life Insurers
3. Health Insurers

B. Organizational Form

C. Consolidation (Access to Capital)

II. DISTRIBUTION SYSTEMS

A. Types of Marketing Systems

1. Independent Agents and Brokers (agent v. broker)
2. Exclusive Agents and Direct Writers
3. Direct Response
   a. Mail, telephone print media
   b. Internet and Web

B. Market Share (%) by Distribution System

1. Personal Lines – Direct Writer 65% +

2. Commercial Lines – Agency Companies 65% +

III. INSURER OPERATIONS

A. Functional Areas of the Insurance Company

1. Sales and Marketing
2. Underwriting (risk selection)
3. Claims (paying and reserving for losses)
4. Product Development
5. Ratemaking (actuarial, pricing of policies)
6. Investments
7. Risk Management Services – loss control, data management
8. Accounting, Legal, IT

B. Insurance Accounting

1. GAAP v. SAP
    a. Going concern v. liquidation
    b. Expenses recognized immediately; revenues accrued
    c. Admitted v. non-admitted assets
    d. Assets – Liabilities = Net Worth

       "Owned – Owed" = Surplus

2. Assets

   a. Investments

   b. Asset Mix

3. Liabilities

   a. Unearned premium Reserves (UPR)

   b. Loss Reserves (2/3 of liabilities)

      i. Settled But Not Yet Paid

      ii. Reported But Not Yet Settled

      iii. Incurred But Not Reported (IBNR)

4. Liabilities and Surplus

   a. Reserving Errors

      i. Reserve or Loss Development

      ii. Loss Reserve Inaccuracy

   b. Policyholder Surplus (Net Worth)

5. Operating Results

   a. Auto Insurance (2002): Claims 75%, Exp 23%

   b. Home Owners similar

   c. Med Mal: CR 140, Prod Liab: CR 355

6. Capacity to Underwrite

   a. Surplus measures potential "supply"

   b. Changes in assets/liabilities affect surplus

      i. investment returns

      ii. losses

REGULATION OF INSURANCE

I. GOALS OF REGULATION

A. Solvency Policing

B. Consumer Protection

C. Access and Availability

II. HISTORY OF INSURANCE REGULATION

A. Paul v. Virginia (1868)

1. Insurance is not interstate commerce

2. Regulated by the states

B. NAIC (1871)

C. United States v. Southeastern Underwriters Association (1944)

1. Insurance is interstate commerce

2. Subject to federal regulation

D. **McCarran-Ferguson Act (1945)**

1. States continue to regulate

2. States continue to tax the insurance industry

III. INSURANCE INDUSTRY INSOLVENCY

A. **Property/Casualty Insurance Insolvency**

1. 218 Insolvencies, 1993 - 2002

2. Reserve deficiencies: 51% of insolvencies (1993 – 2002)

3. Guarantee Fund Net Assessments: sharp increase '02 hard market

B. **Life/Health Insurance Insolvency**

1. Approximately 100 Insolvencies, 1991 – 2003

2. Relatively stable experience

IV. SOLVENCY POLICING

A. **Statutory Accounting (A = L + Surplus)**

B. **Minimum Capital and Surplus Requirements**

C. **Annual and Quarterly Financial Statements**

D. **Audited Statements Required**

E. **Statements Signed by an Actuary**

F. **Company Examinations (every 3 to 5 years)**

G. **Investment Restrictions**

1. Type, quality, and quantity

2. Insurers typically match assets and liabilities

H. **Minimum Reserve Requirements**

I. **Solvency Monitoring**

1. Insurance Regulatory Information System (IRIS)

2. FAST

3. Risk-Based Capital Requirements

4. Ratings (Best, S&P, Weiss)

J. **Holding Company Issues**

V. CONSUMER PROTECTION

A. Product and Price

1. Rate criteria

    a. Not inadequate

    b. Not excessive

    c. Not "unfairly" discriminatory

2. Types of rating laws

3. Policy forms (products)

B. Underwriting

C. Agents and Brokers

D. Unfair Trade Practices

E. Market Conduct Examinations

F. Adjusters

G. Reinsurance

H. Entry and Exit from State Markets

I. **Residual Markets**

J. **Guaranty Funds (post-assessment)**

K. **Insurance Fraud (insider & outsider)**

VI. STATE INSURANCE DEPARTMENTS

A. **Budgets Set by State Legislatures**

B. **Typically Funded through Fees and Taxes Charged to Insurers**

C. **Coordination Between States Fostered through NAIC**

D. NAIC

1. Stipulates the annual statement
2. Model laws and regulations
3. Solvency agenda
4. Accreditation

VII. CURRENT ISSUES IN REGULATION

A. **Convergence in Financial Servcies**

B. **Increasing M&A Activity**

C. **Growth of the Internet**

D. **Insolvencies**

E. **Quality of Regulation**

F. **Deregulation of Commercial Lines**

G. **Speed to Market**

H. **Terrorism Coverage / Pricing**

I. **Agent / Broker Compensation**

J. **Underwriting information**

VIII. EXCESS AND SURPLUS LINES (E & S)

A. Non-admitted Insurer

1. P/C insurance coverage not available from licensed insurer
2. Must be purchased from non-admitted carrier

B. Examples

1. Unusual risks
2. Allowed rates are insufficient to cover risk

C. Indirectly Regulated by Licensing E&S Brokers

RISK MANAGEMENT PUBLIC POLICY

I. RISK MANAGEMENT REVIEW

A. Identify Exposures to Loss

B. Measure Exposures

1. Frequency
2. Severity

C. Select Technique to Handle the Risk

1. Available Methods

    a. Avoidance

    b. Retention

    c. Loss Control (Prevention, Reduction)

    d. Transfer

    e. Sharing

2. Selection Considerations

    High Frequency, High Severity: Avoidance
    High Frequency, Low Severity: Retention, Loss Control
    Low Frequency, High Severity: Transfer
    Low Frequency, Low Severity: Retention

D. Implement and Monitor the RM Program

II. RISK MANAGEMENT AND PUBLIC POLICY

A. Arguments for Government Involvement

1. Financial Capacity
2. Information Problems
3. Risk Assessment
4. Availability
5. Affordability (subsidy need)
6. Social Welfare (safety net)
7. Risk Reduction as "Public Good"

B. Regulation of the Risk Pooling Business

1. Solvency
2. Consumer Protection
3. Competition
4. Guaranty Funds

C. Regulation of Risks

1. Loss Prevention and Mitigation
2. Safety and Wellness
3. Negligence and Liability
4. Intentional Acts, Criminal Acts, Fraud

D. Managing Risk through Legislation

Some examples:

Fire Protection

Zoning Laws

Building Codes

Public Safety

Highway Safety

Motor Vehicle Standards

Licensing (occupation)

Workplace Safety

Product Safety

Sanitation,

Pollution

Hazardous Material

Employment Conditions

Education,

Criminal Law

E. **Losses and Prevention Costs**

1. Who Pays?

   a. Individual's Own Wealth

   b. Costs of Goods and Services

   c. Premium Payer

   d. Taxpayer

   e. Risk Shifting

   f. Cost Shifting

F. **Costs and Benefits**

1. Comparative Advantage (most efficient risk bearer)

2. Efficient Allocation of Capital (financial and human)

   a. Availability of Goods and Services

   b. Excessive Liquidity Not Required

   c. Efficient Decision Making

   d. Incentive to Modify Behavior

G. Risk Managers

1. Individuals

2. Employers

3. Providers of Goods and Services

4. Public Policymakers

   a. Local

   b. State

   c. Federal

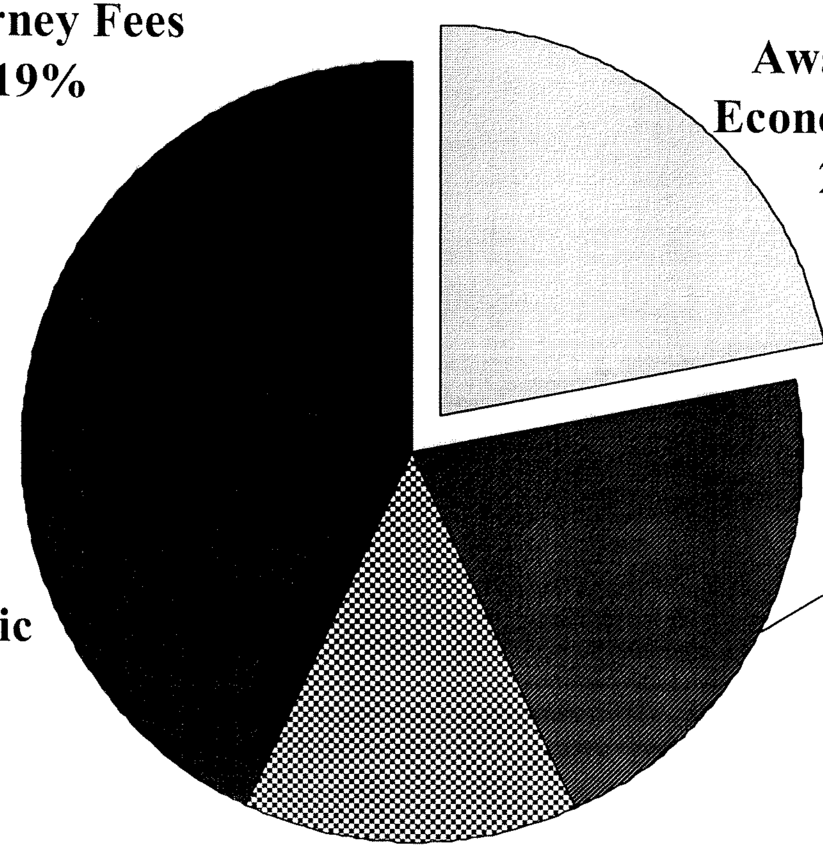
Risk Characteristics as Determinants of the Tool

		Frequency Of Losses	
		High	Low
Severity Of Losses	High	Avoidance	Transfer
	Low	Retention & Control	Retention

Where the Tort Dollar Goes
(2002)

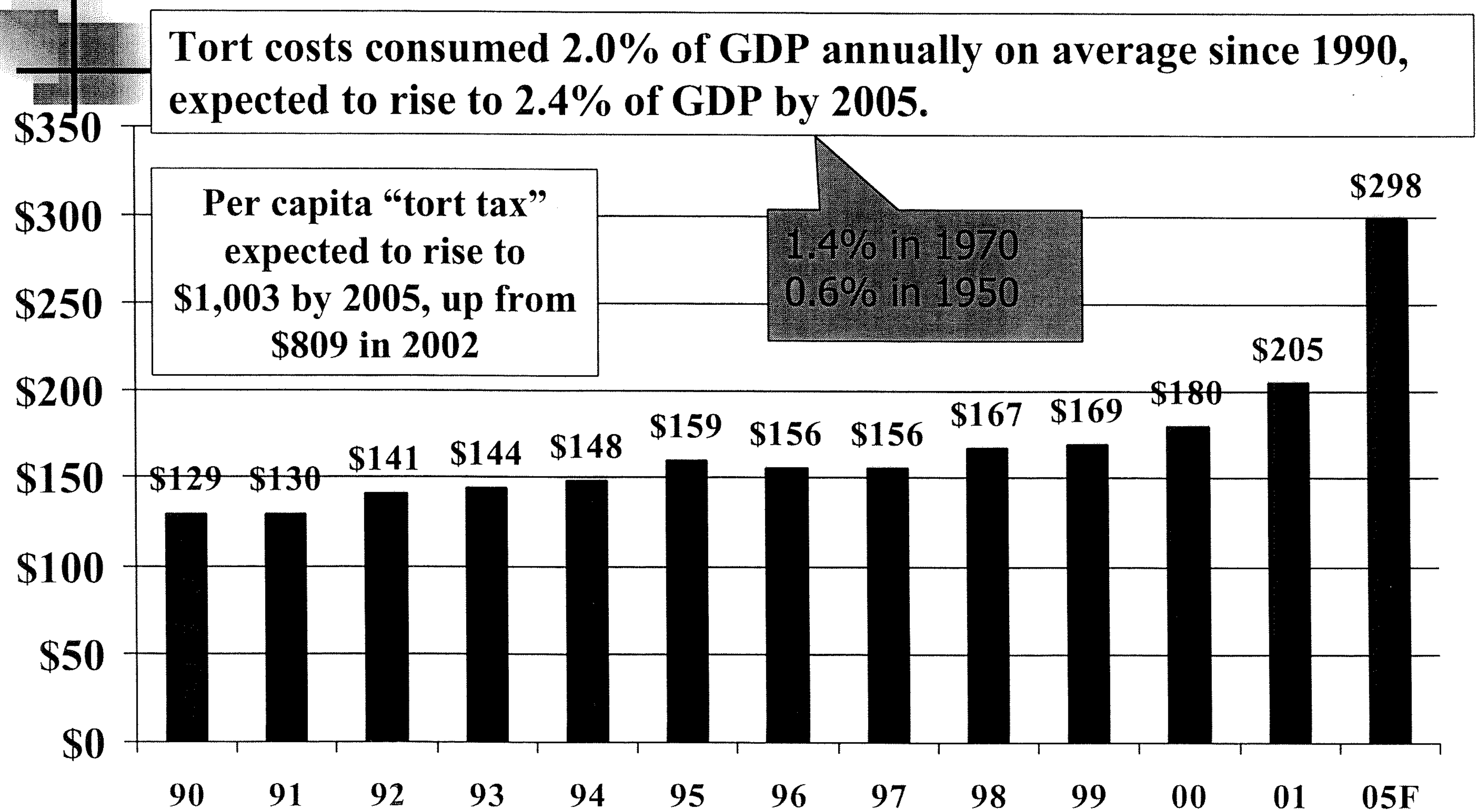
Tort System is *extremely* inefficient:

- Only 22% of the tort dollar compensates victims for economic losses
- At least 54% of every tort dollar never reaches the victim



Source: Tillinghast-Towers Perrin

Cost of U.S. Tort System ($ Billions)



Source: Tillinghast-Towers Perrin. 2005 forecasts from Tillinghast.

"Cost of production for liability insurers"